



X-Plain™ *Menopause*

Reference Summary

Menopause marks the time when a woman stops having a monthly menstrual period. All women go through menopause, usually between the ages of 40 and 55.

During menopause, women go through physical and mental changes. Understanding these changes helps you know what to expect and how to cope with the changes.

This reference summary will help you better understand the signs of menopause and what you can do to cope with them.

Anatomy

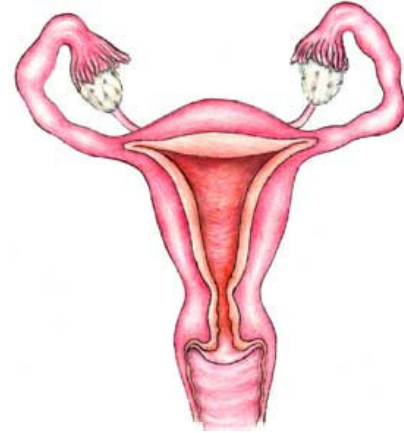
The female reproductive organs include:

1. the vagina
2. the uterus
3. the fallopian tubes
4. the ovaries

The female reproductive organs are located in the pelvis, between the urinary bladder and the rectum.

The ovaries are glands, with 2 main functions.

1. The production of specialized hormones, such as estrogen and progesterone.
2. Ovulation, which is the release of eggs needed for reproduction.



Estrogen and progesterone prepare the inner lining of the uterus in case a pregnancy takes place. These hormones also regulate when eggs are released.

When an egg is released, it goes down the fallopian tube and into the uterus, where it may or may not be fertilized by a sperm.

If fertilized, the egg becomes implanted in the uterus where the fetus grows.

If not fertilized, the egg and the inner lining of the uterus are discharged to the outside of the body through the cervix and the vagina during the menstrual period.

The menstrual cycle is usually 28 days. The levels of estrogen and progesterone increase before and after ovulation. If the egg is not fertilized, hormone levels decrease and menstruation begins.

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Estrogen and progesterone are only 2 of the many hormones that control the menstrual cycle.

In addition to regulating the menstrual cycle, estrogen keeps bones healthy. It may also affect cholesterol levels, keep skin and arteries more elastic, and possibly help memory.

Menopause

Menopause causes periods to become irregular and eventually stop. Menopause occurs when the ovaries quit making hormones and releasing eggs.

When a woman is in her mid 30s, her ovaries begin to change the amount of estrogen and progesterone they make.

Although it is very rare for a woman to have menopause before the age of 40, it can happen anytime between the ages of 30 to mid 50s or later. Smokers often begin menopause earlier than non-smokers do.

Estrogen & Life Stages

In terms of menstrual periods and estrogen levels, women pass through 5 stages throughout life.

1. Pre-puberty
2. Puberty
3. Perimenopause
4. Menopause
5. Postmenopause

Pre-Puberty

During this stage, a girl does not have periods because her ovaries are not releasing eggs yet. She also does not have breasts or rounded hips and thighs.

Puberty

At puberty, a young girl begins to have a monthly period. This usually occurs around 12-13 years of age. The body makes more estrogen, which causes breasts, pubic and axillary hair, and rounded contours of hips and thighs.

With puberty, a woman enters the reproductive stage of her life. This stage lasts for 20-40 years. During this stage, a woman can become pregnant if the egg is fertilized after ovulation.



Perimenopause

Perimenopause is the stage before the last menstrual period. This stage starts 3-5 years before the last menstrual period and ends about a year after the final period. Some signs or symptoms of menopause may appear during perimenopause.

A woman can become pregnant during perimenopause. Even if periods are irregular during perimenopause, it is best to take precautions if pregnancy is unwanted.

Menopause

The event that marks menopause is your final menstrual period. You will know for sure that

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you have experienced menopause when you have not had a period for one year.

For a few years, the decreased level of estrogen causes body changes and signs such as hot flashes. These signs are discussed in more detail later.

Postmenopause

Postmenopause, the last stage, is after menopause. During this stage, the signs of menopause diminish and go away.

During postmenopause, a woman does not have menstrual periods and cannot get pregnant. However, there is greater risk for some health problems during postmenopause.

The average lifespan of the American female is 78 years. The average age for menopause is 50. This means postmenopause, the last stage is about as long as the reproductive stage for American females.

Signs & Symptoms

Changing levels of estrogen and progesterone can cause a variety of symptoms. You may have little or no trouble with hot flashes or other signs of menopause. Some women, however, have slight discomfort.



Common signs of menopause include

- irregular periods
- hot flashes
- vaginal and bladder problems
- fatigue and sleep problems
- mood changes
- body changes

Coping

The following section discusses the signs of menopause and what you can do to cope with them.

Irregular periods

One of the first signs of menopause is a change in your periods. They may become less regular or light. Periods of heavy bleeding are normal, too.

Very heavy bleeding for many days, periods less than 3 weeks apart, periods that last longer than 10 days, or spotting between periods may also happen. Check with your doctor if you find any of these signs troublesome.

Hot flashes

A *hot flash*, or *flush*, is common in perimenopause. About 80% of American women have them. Suddenly you feel heat in the upper part or all of your body. Your face and neck become flushed. Red blotches may appear on your chest, back, and arms. Heavy sweating and cold shivering may follow.

Hot flashes can be as mild as a light blush or severe enough to wake you from a sound sleep. Most flashes last 30 seconds to 5

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minutes. They should disappear within a few years after menopause.

Here are some tips that help you to keep cool when a hot flash starts.

- Go somewhere that is cool.
- Remove a layer of clothing. It is best to dress in layers that you can take off if you get warm.
- A cold drink of water or juice.
- Use a portable fan.

Here are some tips that may keep hot flashes from waking you up during the night.

- Sleep in a cool, well ventilated room.
- Wear light-colored clothing made of natural fibers.
- Use sheets and clothing that let your skin breathe.

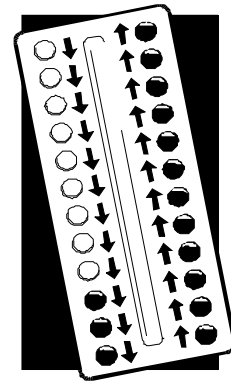
Try keeping a diary of when hot flashes happen and what may start them. This can help you figure out what to avoid.

Sex

Around the time of menopause, your feelings about sex might change. You might have trouble becoming sexually aroused because of hormone changes, discomfort due to changes in the vagina, or medicines you are taking.

On the other hand, you might feel freer and sexier after menopause, relieved that pregnancy is no longer a worry. Remember that after menopause you can still get sexually transmitted diseases, such as HIV/AIDS.

Until you have gone 1 year without a period, you should continue to use birth control if you do not want to become pregnant.



Fatigue and sleep problems

Feeling tired is a common symptom of menopause. You might have trouble getting to sleep, waking up early, or getting back to sleep after waking up in the middle of the night. Night sweats or the need to go to the bathroom may wake you up.

If you have not slept well at night, try taking a nap during the day.

Mood changes

Some people think that women are more moody, irritable, or depressed during menopause. There could be a connection between changes in your estrogen level and your emotions.

Other causes for mood swings might be stress or family changes such as children leaving home.

Exercise helps to reduce stress. Avoiding or reducing caffeine may also reduce stress and sleep problems.

Changes in your body

Visible changes with menopause may include:

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- weight gain in the waist area
- loss of muscle mass and increase of fatty tissue
- thinning and loss of stretchiness in the skin
- reduction in breast size

Other possible body changes include headaches, memory problems, and joint and muscle stiffness or pain.

Postmenopause

One year after menopause, hot flashes and night sweats may stop. However, reduced estrogen levels may cause other long-term effects on your body in organs such as

- the bones
- the heart
- the vagina
- the bladder
- the skin

Bones

Menopause can weaken your bones, a condition called osteoporosis. Reduced estrogen surrounding menopause means that bone strength could be lost even faster.

Osteoporosis can lead to fractures of the hip, wrists, vertebrae, sacrum and other bones of the body.



Getting plenty of calcium and vitamin D, before AND after menopause, can lower the risk of osteoporosis. Milk and dairy products, such as cheese and butter, are a good source of calcium and Vitamin D.

Exercise may also keep muscles and bones strong and reduce the chance of falling and breaking bones. 30 minutes of weight-bearing exercises like walking, jogging, or weight lifting 3 days a week or more is best.

Taking estrogen will also prevent bone loss. Other drugs approved for osteoporosis by the Food and Drug Administration (FDA) include

- raloxifene
- alendronate
- calcitonin

Heart disease

As estrogen levels go down during menopause, older women may tend to have higher cholesterol levels.

High cholesterol increases the chance of heart disease, stroke, and other diseases that affect the heart and blood vessels. After menopause, a woman's risk of heart disease rises greatly. In fact, heart disease kills more women than lung or breast cancer.

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The following tips will help you keep your chance of heart disease down.

- eat low-fat foods such as fruits, vegetables, and whole-grains
- do not smoke
- maintain a healthy weight
- exercise regularly.

A recent NIH study has found that the combination of estrogen and progestin (a form of progesterone) increases the risk of heart attacks, strokes and blood clots in the lungs and legs.

The vagina

Body tissue in the genital area becomes dry and thin as estrogen levels change. Sexual intercourse may become painful because of this dryness. You may be more likely to have vaginal infections.

To ease vaginal discomfort during sexual intercourse, use a water-based lubricant such as KY Jelly®, but not petroleum jelly. Other creams and medications are also available to alleviate this problem.

The bladder

As you get older, you may begin to have urinary tract problems, such as incontinence.

Urge incontinence is when you have trouble holding urine when you feel the need to go to the bathroom.

Stress incontinence is when you have trouble holding urine when you sneeze, cough, laugh, run, or step down.

If you have incontinence problems, you should talk to your doctor about it.

Hair and Skin

The skin may become dry and more wrinkled due to menopause. The hair may become thinner. Facial hair may also grow on the upper lip or chin.

Unwanted hairs can be removed by a variety of methods. Using sunscreen and not smoking can help to reduce wrinkles.

Cancer

Different types of cancer are more common after menopause. The earlier cancer is found, the easier it is to treat and sometimes even cure. You should do self-breast exams and schedule regular diagnostic exams at the doctor's office.

After a self-exam, be sure to contact your doctor right away if you notice spotting, a lump in your breast, or a sense of fullness or bloating in your abdomen.

Remember to get a Pap Smear test, mammogram, and pelvic and breast examinations every year. These tests help to detect cancers in their early stages.

Hormone Supplements

Estrogen Supplements

In perimenopause, your doctor might suggest birth control pills. These will prevent pregnancy, make your periods more regular, and lower your chance of cancer of the uterus and ovaries. Birth control pills may also reduce symptoms like hot flashes.

Birth control pills mask the arrival of menopause. When you think you might have reached menopause, you could stop taking the

pill for several months to see if you still have a regular period.

Once you had reached menopause, your doctor used to suggest a combination of estrogen and progesterone, known as hormone replacement therapy, or HRT. For women without a uterus, the doctor used to recommend estrogen alone. This is called estrogen replacement therapy or ERT.

An NIH study has however shown that the combination of estrogen and progestin actually increases the risks of:

1. Heart diseases
2. Strokes
3. Blood clot in the lungs and legs, and
4. Breast cancer

This same combination was also shown to decrease the risks of:

1. Fractures due to osteoporosis, and
2. Cancer of the colon

It was also found to have no effect on the risk of cancer of the uterus. In view of these findings it has become even more important for women to discuss with their physicians the use of hormone replacement therapy.



More often than not the risks of such therapy outweigh the benefits. Other non-hormonal

methods, mentioned earlier in this module, may be used instead.

Phytoestrogens

Phytoestrogens are estrogen-like materials found in cereals, vegetables, beans, and some herbs. They may work in the body like a weak form of estrogen. Some may lower cholesterol levels. The effectiveness of these "natural" estrogens has not been proven. Some plant estrogens are now being studied.

Soy, wild yams, and herbs such as black cohosh, dong quai, and valerian root have been known to relieve the symptoms of menopause.

If you decide to eat a lot more foods with phytoestrogens, be sure to tell your doctor. Any food or over-the-counter product that you use for its drug-like effects could interact with other prescribed drugs or cause an overdose.

Summary

Menopause and postmenopause are natural stages of a woman's life. Knowing what to expect and how to deal with these changes is important in making a smooth transition.

The decisions about how to handle menopause and hormone replacement therapy are best made by talking with your doctor. Any decision you make is not final. You can and should review it with your doctor every year during your annual checkup.

Thanks to advances in medicine and public health, women live twice as long as they did 1000 years ago! More than 1/3 of this time is after menopause. It is therefore seen by more and more women as a time to take pride in achievements and discover a new zest for life!